APPENDIX N

Endnotes

TABLE OF CONTENTS

N-1. Introduction 1
N-2. Purpose and Need 2
N-3. Alternatives 3
N-4. Affected Environment, Environmental Consequences, and Mitigation 4

N-1. INTRODUCTION

1. Port Authority of New York and New Jersey (Port Authority) is a body corporate and politic, created by Compact between the states of New York and New Jersey with the consent of the U.S. Congress that oversees or operates many aspects of transportation in the region. Airports operated by the Port Authority include LaGuardia (LGA), John F. Kennedy International (JFK), Newark Liberty International (EWR), Teterboro (TEB), and New York Stewart International (SWF) airports. The Port Authority oversees land, rail, and sea traffic in addition to airports.
2. An Airport Layout Plan (ALP) is a scaled drawing or set of drawings of existing and future airport facilities that provides a graphic representation of the existing and long-term development plan for the airport and demonstrates the preservation and continuity of safety, utility, and efficiency of the airport to the FAA's satisfaction (US Department of Transportation, Federal Aviation Administration, Advisory Circular 150/5300-13B, *Airport Design*, March 31, 2022).
3. US Department of Transportation, Order 5610.1D, *Procedures for Considering Environmental Impacts*, July 1, 2025.
4. US Department of Transportation, Federal Aviation Administration, Order 1050.1G, *FAA National Environmental Policy Act Implementing Procedures*, June 30, 2025.
5. US Department of Transportation, Federal Aviation Administration, Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions, April 28, 2006.
6. US Department of Transportation, Federal Aviation Administration, 1050.1F Desk Reference, Version 4, September 2023. The 1050.1 Desk Reference may be cited only as a reference for the guidance it contains and not as a source of requirements under laws, regulations, or other authorities Id., § I.1.
7. US Department of Transportation, Federal Aviation Administration, *Environmental Desk Reference for Airport Actions*, October 2007. This reference summarizes applicable laws and does not replace legal requirements. See id., Introduction.
8. Midtown Manhattan is generally considered the epicenter of New York City due to its concentration of global commerce and finance activities. It hosts the headquarters of numerous multinational corporations, financial institutions, and media companies, making it a central hub for business operations. Landmarks such as the New York Stock Exchange, located in nearby Lower Manhattan, and the presence of major banks and investment firms underscore its financial significance. Additionally, the area is home to the United Nations headquarters and Rockefeller Center, which attract international delegations and business leaders.
9. John F. Kennedy International Airport (JFK) and LaGuardia Airport (LGA) operate close to constrained capacity limits and are slot-controlled, which requires advanced approval for aircraft to operate at those airports during the slot-controlled hours; Newark Liberty International Airport (EWR) has a voluntary schedule facilitation process in place to prevent unacceptable levels of delay.
10. A Fixed Based Operator (FBO) is an airport service center providing services to pilots and passengers such as passenger and baggage handling; aircraft services such as fueling, parking, maintenance, deicing; and other services such as car rentals, hotel reservations, and pilot lounges. (Port Authority of New York and New Jersey, Airport Information Webpage, available at https://aemdev.panynj.gov/airports/en/teterboro/teterboro-operations.html [accessed December 15, 2025]).

11. Aircraft based at an airport, referred to as "based aircraft," are defined as those aircraft that spend a majority of the year at that airport, have an agreement for aircraft storage at that airport, and are operational and airworthy. (US Department of Transportation, Federal Aviation Administration, National Based Aircraft Inventory Program-Frequently Asked Questions website, available at https://www.basedaircraft.com/public/FrequentlyAskedQuestions.aspx#faq3 [accessed December 15, 2025]).
12. Fractional ownership companies provide access to an aircraft based upon the share purchased. When applied to an aircraft, this typically provides an owner a certain number of flight hours per year based on the share purchased. This differs from private jet chartering, which does not require upfront capital or ownership of an asset.
13. An aircraft operation is defined as a plane taking off or landing at an airport.
14. Compound annual growth rate (CAGR) is computed using the following equation: CAGR = (Vfinal/Vbegin)1/t – 1, where CAGR = compound annual growth rate; Vfinal = final value (future year forecast operations); Vbegin = beginning value (current year operations); and t = time in years.
15. Changes in aircraft dimensions are the primary trends identified affecting general aviation and air taxi fleet composition. The business jet sector typically categorizes aircraft as light, medium, or large. Between 2014 and 2024, large jet operations have increased at a faster rate than medium, small, and total jet operations. Recent new aircraft models and variants predominantly feature increased size and performance specifications due to industry and market preference, with existing models phasing out of production also contributing to a decrease in share for small and medium business jets. The proportion of large jets in the fleet is forecast to grow at a faster rate than the average for all jets, driving an increase in the relative share of large jets and a decrease in the shares of medium and light jet operations.
16. The Federal Aviation Administration (FAA) defines aircraft size based on Airplane Design Group (ADG), which delineates standard ranges of aircraft wingspan and height. Of the six defined ADG classifications (i.e., ADG I through ADG VI), most general aviation and air taxi aircraft are classified as ADG I (e.g., Piper PA-31), ADG II (e.g., Bombardier Challenger series), or ADG III (e.g., Gulfstream G650). Large business jets are typically classified in the ADG II and ADG III categories. While the historic number of ADG III large business jets have been relatively small, the relative percentage of ADG III aircraft in the GA fleet has increased.
17. FAA Advisory Circular 150/5300-13B defines the critical aircraft as the most demanding aircraft type, or grouping of aircraft with similar physical and operational characteristics, that make regular use of an airport. Regular use is 500 or more annual operations, excluding touch-and-go operations.
18. US Department of Transportation, Federal Aviation Administration, *2024 Terminal Area Forecast*, January 2025.
19. US Department of Transportation, Federal Aviation Administration, Traffic Flow Management System Counts (TFMSC), April 2025.

N-2. PURPOSE AND NEED

20. Itinerant aircraft operations are arrival and departure operations by aircraft based at an airport other than TEB.
21. US Department of Transportation, Federal Aviation Administration, *Advisory Circular 150/5300-13B, Airport Design*, March 31, 2022.

22. Transportation Research Board of the National Academies, Airport Cooperative Research Program, *Report 113, Guidebook on General Aviation Facility Planning*, September 11, 2014.
23. The analysis of facility requirements and forecasts were updated in 2025 and thus used 2024, the last full year of aircraft operational data available, to represent existing conditions.
24. See: Federal Aviation Administration, "Airport Improvement Program Grant Assurances for Airport Sponsors," May 2022, https://www.faa.gov/airports/aip/grant_assurances/assurances-airport-sponsors.
25. Under 49 U.S.C. § 47107(a) and associated grant assurances, the Port Authority, as airport sponsor, is responsible for maintaining facilities in accordance with the approved Airport Layout Plan (ALP) in order to operate the Airport safely and efficiently while ensuring it remains available to all aeronautical users on reasonable and nondiscriminatory terms. Additionally, due to the type of aircraft operating at TEB, the Port Authority must comply with 49 U.S.C. § 44706, implemented through 14 CFR Part 139, which requires they obtain an Airport Operating Certificate and adopt and comply with an Airport Certification Manual (ACM) that identifies procedures for the safe operation of the airport. While the Port Authority cannot arbitrarily restrict aeronautical use, it may establish reasonable, uniformly applied conditions necessary to maintain safe and efficient operations consistent with FAA guidance and standards. The FAA has plenary authority for establishing and overseeing standards that ensure safe and efficient operations within the airfield and airspace. The TEB runway and taxiway system can safely accommodate the aircraft arrivals and departures; however, there is insufficient space for aircraft to park at Signature facilities at TEB during peak periods due to the increasing size of aircraft and the winglets that most jet aircraft now have.
26. Aircraft parking requirements are based on the size or category of aircraft, which accounts for aircraft length and wingspan, as well as buffer areas between adjacent parked aircraft. The average maximum aircraft parking capacity for Signature East and Signature South facilities was developed and is discussed in Section 2.4.1 of the forecast report (see Appendix A). Also, see Appendix B (Facility Requirements); US Department of Transportation, Federal Aviation Administration, Advisory Circular 150/5300-13B, *Airport Design*, March 31, 2022; and Transportation Research Board of the National Academies, Airport Cooperative Research Program, Report 113, Guidebook on General Aviation Facility Planning, September 11, 2014.
27. Wing walkers are airline agents positioned on the apron near the wings of an aircraft to ensure the area is clear and safe for aircraft movement, such as parking or taxiing.
28. When its apron cannot safely accommodate any more aircraft or when movement onto/off the apron is blocked by aircraft, Signature closes the apron and turns away any additional aircraft seeking to access their facilities. Signature agents communicate the status of the apron with TEB ground control, who then notify pilots that the Signature apron is closed or open.

N-3. ALTERNATIVES

29. US Department of Transportation, Federal Aviation Administration, Order 1050.1G, *FAA National Environmental Policy Act Implementing Procedures*, June 30, 2025.
30. As noted in Table 2-1, usable apron for aircraft parking excludes taxilanes that provide access to hangars and aircraft parking positions. However, for purposes of the alternative screening analysis, only the total apron space was used for comparison to area requirements.

31. As discussed in Section 2.2.1, facility requirements are based on general space needs, which may be higher or lower depending on site limitations, configuration issues, and configuration of facility components to meet current and forecast demand. Thus, facility requirements identified during analysis may differ from what is proposed for construction and not the final development numbers. As such, this criterion evaluated whether an alternative would generally meet the minimum space requirements (within 10 percent).
32. National Business Aviation Association, "Business Aviation Airports: A Contrast to the Commercial Airline Hubs," https://nbaa.org/advocacy/legislative-and-regulatory-issues/business-aviation-essential-to-local-economies-and-national-interest/business-aviation-airports-a-contrast-to-the-commercial-airline-hubs/ (accessed August 1, 2024).
33. US Department of Transportation, Federal Aviation Administration, *Airport Sponsor Assurances*, April 2025.
34. Alternative 6 Configuration 7 would expand the Signature South lease boundary to the southwest. While no specific layout has been developed, it is anticipated that new development within this area could accommodate adequate FBO facilities consistent with expansion alternatives to the north (Alternative 6 Configuration 1 through Alternative 6 Configuration 6).
35. For purposes of this analysis, major modifications was defined as requiring construction of new taxiways, relocating critical FAA navigational aids such as glide slope antennas or instrument landing systems, or would require extending utilities into portions of the airport currently lacking any utility infrastructure.
36. For purposes of this analysis, reasonable to construct was defined as site disturbance of less than 10 acres for either Signature East or Signature South, as well as minimal demolition and relocation of existing facilities. Alternatives that would require site disturbance of more than 10 acres, significant demolition, or relocation of existing structures were considered to not be reasonable.
37. The glide slope antenna is a navigational aid that provides vertical guidance for aircraft during approach and landing. The glide slope antenna must be located within specific proximity to the runway end in order to provide vertical guidance to pilots.

N-4. AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND MITIGATION

38. Multiple taxiways (Q, C, and A) are surpassing 15 years since last major upgrades have been performed, and the pavement is approaching its end of useful life. The project provides for three-inch milling and overlaying of the taxiways and shoulders, regrading of shoulders to improve drainage, installation of taxiway fillets, and replacement of pavement markings, electrical infrastructure, lighting and signage, as required, to maintain a state of good repair and comply with the latest FAA standards. Construction for these proposed projects are likely to start between April 2027 and end around April 2030. The environmental effects of this project will be analyzed in the future and completed prior to construction.
39. As part of a noise mitigation plan, the relocation of the airport's run-up procedures to a centralized run-up pad in an area that is far from the airport property line has been recommended. Run-ups for TEB currently occur most frequently at the northern end of the airfield and less frequently at the eastern end of the airfield at the Taxiway G ramp, and at the southern end of the airfield on the Taxiway L ramp. Each of these locations are close to the perimeter of the airport. The relocation to a more centralized location will result in a reduction

of noise levels experienced by the surrounding communities. The work consists of removal of existing soil and grass area between Taxiway Q and Taxiway G and construction of a run-up pad, including installation of ten inches of asphalt pavement over a dense graded aggregate base course consisting of crushed stone and gravel, and associated drainage infrastructure, such as catch basins and piping. In addition, appurtenances to capture deicing fluids (such as a catch basin insert and valve that can be closed to prevent discharge from the catch basin into the stormwater system) will be incorporated into the drainage system so that the area can also accommodate aircraft deicing operations. This proposed project is likely to occur July 2030 to July 2031. The environmental effects of this project will be analyzed in the future and completed prior to construction.

40. Airport perimeter fences are designed for security and safety, preventing inadvertent entry of people and wildlife into the Air Operations Area (AOA). The perimeter fence at TEB will be updated to include the following security and safety enhancements: Location 1 (West Riser Ditch on Industrial Avenue): Install horizontal stainless steel bars with vertical posts into the existing soil and water. Proposed horizontal bar system to be welded to the existing fence; Location 2 (West Riser Ditch on Moonachie Avenue): Install a box culvert with horizontal bars attached to the opening; Location 3 (East Riser Ditch on Moonachie Avenue): Install horizontal bars attached to existing culvert opening; Location 4 (East Riser Ditch on Fred Wehran Drive): Install horizontal stainless steel bars with vertical posts into the existing soil and water. Proposed horizontal bar system to be welded to the existing fence. This proposed project is estimated to start construction in April 2027 and be complete May 2028. The project will be applying for federal funding and therefore will be subject to NEPA approvals. The environmental effects of this project will be analyzed in the future and completed prior to construction.
41. The original Engineered Material Arresting System (EMAS) at the TEB Runway 6 departure end was installed in 2007 and is the oldest bed within the Port Authority's airport system. The EMAS beds have a twenty-year life and the EMAS must be replaced by 2027 to maintain safe runway operations and to comply with the latest FAA standards. The work consists of design, construction, and installation of an EMAS for the Runway 6 departure end RSA (Runway Safety Area) at TEB which will replace the existing bed and blocks. Anticipated construction timeline of April 2027 to April 2029. The environmental effects of this project will be analyzed in the future and completed prior to construction.
42. Federal Aviation Administration, *Noise Exposure Map Notice for Teterboro Airport, Teterboro, New Jersey*, 82 FR 28545 (June 22, 2017).
43. Federal Aviation Administration, *Approval of Teterboro Airport (TEB) Noise Compatibility Program, Teterboro, New Jersey*, 88 FR 2751 (January 17, 2023).
44. US Department of Agriculture, Global Croplands Data, https://www.usgs.gov/apps/croplands/app/map?lat=0&lng=0&zoom=2 (accessed December 11, 2025).
45. Although the project area lies within the jurisdiction of the New Jersey Sports and Exposition Authority (NJSEA), land owned by the Port Authority is subject to N.J.S.A. 32:1-1 et seq. and is exempt from NJSEA zoning regulations.
46. Particulate matter includes both coarse particulate matter (PM_{10}) and fine particulate matter ($PM_{2.5}$). Coarse particulate matter are inhalable particles that have an aerodynamic diameter ranging from 2.5 to 10 micrometers (µm), which distinguishes them from the smaller airborne particulate matter referred to as fine ($PM_{2.5}$). There are individual NAAQS for both coarse and fine particulate matter, identified in Table 4-1.
47. US Environmental Protection Agency, Green Book, *8-Hour Ozone (2008) Designated Area Area/State/County Report*, https://www3.epa.gov/airquality/greenbook/hbca.html (accessed December 10, 2025).

48. Severe 15 nonattainment refers to areas that have a design value of 0.105 up to but not including 0.111 ppm for 2008 8-hour ozone criteria.

49. US Environmental Protection Agency, Green Book, *8-Hour Ozone (2015) Designated Area Area/State/County Report*, https://www3.epa.gov/airquality/greenbook/jbca.html (accessed December 11, 2025).

50. *Designations of Areas for Air Quality Planning Purposes; New York, New Jersey, Connecticut; New York-Northern New Jersey-Long Island, NY-NJ-CT 2015 8-Hour Ozone Nonattainment Area Reclassification to Serious,* 89 FR 60314 (July 25, 2024), https://www.govinfo.gov/content/pkg/FR-2024-07-25/pdf/2024-16244.pdf.

51. Operational sources may also include changes in vehicle trips and increase in stationary sources, such as natural gas space heaters, water heaters, and emergency generators. However, based on the scope of the Proposed Action, it is anticipated that operational changes to these sources would be nominal and therefore were not quantified. See additional information in Appendix E.

52. US Environmental Protection Agency, General Conformity *De Minimis* Tables, https://www.epa.gov/general-conformity/de-minimis-tables (accessed December 11, 2025).

53. The largest Signature East configuration, Alternative 5 Configuration 2, is approximately 12 percent larger than the Proposed Action alternative for Signature East, Alternative 5 Configuration 5. The largest Signature South configuration, Alternative 6 Configuration 2, is approximately 81 percent larger than the Proposed Action alternative for Signature South, Alternative 6 Configuration 6.

54. Signature will adhere to the applicable regulations enforced by New Jersey Department of Environmental Protection to protect air quality resources, which may include obtaining stationary construction equipment permits (N.J.A.C. 7:27-8.2(c) 1-22 and N.J.A.C. 7:27-8.2(d)15); adhering to the three-minute idling limit (N.J.A.C. 7:27-14 and 15); controlling fugitive dust and preventing off-site odors (N.J.A.C. 7:27-5.2); and adhering to applicable state inspection requirements (N.J.A.C. 13:20-46 and 26).

55. The number of ferry flight operations were determined for both the No Action and the Proposed Action scenarios during the forecast period. Using historical Signature Aviation activity at Teterboro from 2022 through 2024, ferry flight operations were identified as representing a relatively consistent share of total Signature operations (ranging from approximately 3.2 to 3.9 percent), with 3.4 percent observed in 2024. Based on this trend, the share of total Signature operations represented by ferry flight operations was assumed to remain constant at 3.4 percent throughout the forecast period. Furthermore, under the No Action scenario, ferry flight operations are assumed to grow proportionally with total Signature operations, resulting in a compound annual growth rate (CAGR) of approximately 2.2 percent over the 2024–2044 forecast period. Therefore, ferry flight operations under the No Action scenario are forecast to increase from 4,333 operations in 2024 to 6,730 operations in 2044. This equates to roughly 11.8 ferry flights per day in 2024, increasing to approximately 18.4 flights per day by 2044. However, under the Proposed Action scenario, ferry flight operations are assumed to be effectively eliminated following completion of the proposed improvements (anticipated by 2028). Accordingly, total Signature and total airport operations under the Proposed Action scenario reflect the removal of forecast ferry flight operations relative to the No Action scenario.

56. Robert J. Cartica, Administrator, State of New Jersey Office of Natural Lands Management, "Proposed Hangar and Buildings – Signature East," letter to Emily Bjorhus, June 9, 2023. The letter identified only rare wildlife species and did not identify rare wildlife habitat within the Direct Study Area and General Study Area.

57. New Jersey Department of Environmental Protection, Bureau of GIS, https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=02251e521d97454aabadfd8cf168e44d (accessed December 17, 2025).

58. US Fish and Wildlife Service, New Jersey Ecological Services Field Office, *Narratives and Best Practices for Federally Listed, Proposed, and Candidate Species in New Jersey*. Updated on May 7, 2025. https://www.fws.gov/sites/default/files/documents/2025-05/20250507_usfws_njfo_species-narratives-and-best-practices_0.pdf (accessed February 26, 2026).

59. The NJDEP Division of Fish and Wildlife's 2025 New Jersey Bald Eagle Project report identifies active and territorial bald eagle nests in Bergen County, the closest of which is in Bogota, New Jersey, more than one mile from the Airport.

60. New Jersey Department of Environmental Protection, *New Jersey Coastal Management Program Section 309 Assessment & Strategy 2021 – 2025*, https://www.nj.gov/dep/cmp/docs/309-assessment-and-strategy-2021-2025.pdf (accessed December 11, 2025).

61. New Jersey Department of Environmental Protection Coastal Management Program, Enforceable Policies, https://www.nj.gov/dep/cmp/czm_enforcepolicies.html (accessed December 11, 2025).

62. Coastal resources and the associated factors for consideration are not included in FAA Order 1050.1G, *FAA National Environmental Policy Act Implementing Procedures*. Therefore, for the purposes of this document, guidance on coastal resources was obtained from FAA Order 5050.4B, *NEPA Implementing Instructions for Airport Actions*.

63. US Department of Transportation, Federal Aviation Administration, Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, April 28, 2006.

64. Per guidance in the FAA Order 1050.1 Desk Reference, state and local regulations for hazardous materials, solid waste, and pollution prevention that apply to a proposed action should be determined on a case-by-case basis and are therefore included here for disclosure purposes.

65. Langan Engineering, *Phase 1 Environmental Site Assessment Report*, October 2016.

66. Langan Engineering, *Update to 28 October 2016 Phase 1 Environmental Site Assessment Report*, September 2020.

67. Langan Engineering, *Update to the 28 October 2016 Phase I ESA Report and 28 September 2020 Phase I ESA Update Memorandum*, October 2023.

68. US Environmental Protection Agency, RCRAInfo Search, https://enviro.epa.gov/envirofacts/rcrainfo/search (accessed December 17, 2025).

69. In accordance with the Resource Conservation and Recovery Act (RCRA), RCRA hazardous waste handlers are facilities that store and/or treat hazardous waste, including landfills, incinerators, land treatment units, etc.

70. State of New Jersey Department of Environmental Protection Division of Sustainable Waste Management, Transfer Station/Intermodal Container/Material Recovery Facilities (Operating), August 13, 2025, https://www.nj.gov/dep/dshw/hwtf/tsicmrfd.htm (accessed December 15, 2025).

71. Bergen County Utilities Authority, *Designated Disposal Facilities – June 24, 2025*, https://www.bcua.org/vertical/Sites/%7BF76805AC-71CD-427F-AD9B-9E08876F224A%7D/uploads/06.24.25_list.pdf (accessed December 15, 2025).

72. Bergen County Utilities Authority, *Bergen County District Solid Waste Management Plan, Plan Amendment*, https://www.bcua.org/vertical/Sites/%7BF76805AC-71CD-427F-AD9B-

9E08876F224A%7D/uploads/11.15.22_FINAL_program_update_Solid_Waste_Plan_Amendment._93022(1).pdf (accessed December 15, 2025).

73. Langan, "Spill Prevention, Control, and Countermeasure (SPCC) Plan," May 11, 2017.
74. Federal Aviation Administration, Advisory Circular 150/5210-22, *Airport Certification Manual (ACM),* April 26, 2004.
75. Construction that does not impact existing caps or ongoing monitoring within contaminated areas may not also result in releases of contaminated material.
76. Port Authority of New York and New Jersey, *Airport Solid Waste Management and Recycling Standards and Guidelines*, May 1, 2024.
77. Bergen County Utilities Authority, Bergen County District Solid Waste Management Plan, Plan Amendment, https://www.bcua.org/vertical/Sites/%7BF76805AC-71CD-427F-AD9B-9E08876F224A%7D/uploads/11.15.22_FINAL_program_update_Solid_Waste_Plan_Amendment._93022(1).pdf (accessed December 15, 2025).
78. US Department of Transportation, Federal Aviation Administration, Order 1050.1G, *FAA National Environmental Policy Act Implementing Procedures*, June 30, 2025.
79. Port Authority of New York and New Jersey, *Teterboro Airport, 14 Code of Federal Regulations (CFR) Part 150 Final Noise Exposure Map Report*, May 2017.
80. The potential development area south of Signature South (Alternative 6 Configuration 7) was not part of the jurisdictional delineation.
81. Degraded wetlands have reduced functions and values compared to non-degraded wetlands, resulting in fewer available ecosystem services, such as water quality protection, flood storage, and habitat support, than higher-functioning wetland systems.
82. Trees located within the proposed Signature East site have an average diameter at breast height (DBH) of 3 to 8 inches and an average height of less than 20 feet. Trees comprising mature forest have an average DBH of more than 15 inches and an average height greater than 50 feet.
83. New Jersey Department of Environmental Protection, Land Resource Protection Web Application, https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=5934a6e010a942f7a33c76427f71c751 (accessed December 15, 2025).
84. Tide gates are devices (i.e., hinged doors or gates) that control water flow from tidewater areas to drained upland areas.
85. New Jersey Department of Environmental Protection, *2024 Water Supply Plan, Appendix B Surface Water Systems of New Jersey*, https://dep.nj.gov/wp-content/uploads/water-supply-plan/2024-njswsp-appendix-b.pdf (accessed February 19, 2026).
86. New Jersey Department of Environmental Protection, *Well Head Protection Areas For Public Community Water Supply Wells In New Jersey*, https://gisdata-njdep.opendata.arcgis.com/datasets/njdep::well-head-protection-areas-for-public-community-water-supply-wells-in-new-jersey/explore?location=40.849348%2C-74.034517%2C13 (accessed February 19, 2026).

87. State of New Jersey, Department of Environmental Protection, *NJ Stormwater Best Management Practices Manual Chapter 6,* July 2023, https://dep.nj.gov/wp-content/uploads/stormwater/nj-swbmp-chapter-6-july-2023.pdf (accessed December 15, 2025).

88. US Department of Transportation, Federal Aviation Administration, *Advisory Circular 150/5200-33C, Hazardous Wildlife Attractants on or near Airports*, February 21, 2020. For airports serving turbine-powered aircraft, FAA recommends a separation distance of 10,000 feet from the aircraft operations area and wetlands.

89. GreenVest has applied to establish the Upper Penhorn Creek Mitigation Bank at the Guarini Tract, which is currently being reviewed by the Meadowlands Interagency Mitigation Advisory Committee, which consists of representatives from USACE, NJDEP, USEPA, USFWS, NOAA, and NJSEA.

90. US Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx (accessed December 15, 2025).

91. State of New Jersey, Department of Environmental Protection, *NJ Stormwater Best Management Practices Manual Chapter 6,* July 2023, https://dep.nj.gov/wp-content/uploads/stormwater/nj-swbmp-chapter-6-july-2023.pdf (accessed December 15, 2025).